Performance Data Analysis and Reporting System (PDARS)Irving C. Statler

The Performance Data Analysis and Reporting System (PDARS) provides decision-makers with a comprehensive, accurate, and insightful method for routinely monitoring the operational health, performance, and safety of the National Airspace System (NAS). The purpose of PDARS is to provide the technological developments to enable a cultural change from the current reactive approach to identifying and alleviating life-threatening aviation conditions and events to a more proactive approach while still meeting the projected requirements of increasing air traffic. PDARS pursues this objective by establishing a capability for facility-level managers to monitor Air Traffic Control performance in the NAS, identifying and analyzing operational performance problems, and designing and evaluating improvements. PDARS incorporates innovative technology for real-time collection and rapid processing of large volumes of complex data and state-of-the-art tools for extraction, presentation and visualization of information, such as radar flight tracks.

Six FAA facilities representing a microcosm of the NAS – Southern California and San Francisco Bay TRACONs, Los Angeles and Oakland Centers, the Western-Pacific Region, and the System Command Center were selected to participate in an operational evaluation of the concept and tools. An initial PDARS prototype was implemented and fielded at the six sites. Data were accessed daily from all sites, processed overnight, and reports delivered routinely to all six facilities each morning. Examples of the displays and reports appear in Figure 1 and Figure 2 respectively. FAA personnel have been trained on PDARS, and both the system and its reports are being used on a day-to-day basis.

PDARS accomplished several key milestones in this process in FY 2000, including the completion, evaluation, and demonstration of a prototype network, generation of daily reports, and the design review and delivery of the first upgrades to the capabilities of the prototype network. Both informal feedback and a formal design review yielded positive comments on the prototype, guidance for where to pursue upgrades, and a drive to expand the capability to other facilities.